

42.70.001 Indications for Gamma Knife Radiosurgery Policy

Patients may be referred to the Gamma Knife Center for consideration of radiosurgery for the following standard clinical indications:

- Intractable typical **Trigeminal Neuralgia** refractory to medical management
- Brain or dural **Vascular Malformations** considered poorly suited for complete excision by surgical craniotomy or complete obliteration by endovascular embolization.
- Patients with **Brain Tumours** may be referred for gamma knife radiosurgery when considered technically advantageous according to the size and location of tumours. This will include brain tumours located adjacent to critical structures at risk of radiation injury.

General indications for radiosurgery in patients with brain tumours include selected patients with tumours less than 4cm maximum dimension in which surgical resection is not the preferred treatment and one of the following diagnoses:

- **Single brain metastases** as boost therapy in combinations with whole brain radiotherapy (WBRT) in patients with limited or controlled extracranial disease and KPS \geq 70, or
- **1-3 brain metastases** as salvage therapy at the time of local failure after WBRT in patients with limited or controlled extracranial disease and KPS \geq 70;
- Meningioma
- Acoustic Schwanoma
- Pituitary Adenoma
- Glomus Tumors
- Chordoma
- Chondrosarcoma
- Hemangioblastoma
- Pilocytic astrocytoma

Patients may be referred to the Gamma Knife Center for consideration of radiosurgery under a research protocol for non-standard indications. This may include the following:

- Focal **Epilepsy** refractory to medical management.